

CLAIMS

WHAT IS CLAIMED IS:

1. A method for transmitting data associated with an object tracked by a fleet and asset management system over a wireless network, the method comprising:
storing data received from an input interface coupling the object;
receiving over the wireless network a request message from the fleet and asset management system, the request message specifying a schedule for transmission of the stored data to the fleet and asset management system and associated schedule activation information, wherein the schedule activation information specifies activation of the schedule based upon a state of the input interface; and
selectively transmitting the stored data over the wireless network to the fleet and asset management system according to the schedule, if the schedule is activated.
2. A method according to claim 1, wherein the wireless network is a two-way paging system and includes a Global Positioning System (GPS) reference network, the method further comprising:
transmitting a location data request for Assisted-Global Positioning System (A-GPS) data over the wireless network to the fleet and asset management system;
receiving the A-GPS data in response to the location data request; and
determining location of the object based upon the A-GPS data.
3. A method according to claim 2, further comprising:
obtaining GPS data independent from the fleet and management system; and
determining the location of the object based on the GPS data.

4. A method according to claim 1, wherein the input interface couples to a sensor or switch of the object for retrieving the data.

5. A method according to claim 1, further comprising:

receiving a data log message from the fleet and management system over the wireless network, the data log message specifying scheduling information for collection of the data.

6. An apparatus for transmitting data associated with an object tracked by a fleet and asset management system over a wireless network, the apparatus comprising:

an input interface coupled to the object;

a data log configured to store data received from the input interface; and

a two-way wireless modem configured to receive over the wireless network a request message from the fleet and asset management system; and

a processor configured to extract, from the request message, a schedule for transmission of the stored data to the fleet and asset management system and associated schedule activation information, wherein the schedule activation information specifies activation of the schedule based upon a state of the input interface,

wherein the modem selectively transmits the stored data over the wireless network to the fleet and asset management system according to the schedule, if the schedule is activated.

7. An apparatus according to claim 6, wherein the wireless network is a two-way paging system and includes a Global Positioning System (GPS) reference network, and the processor is further configured to generate a location data request for Assisted-Global Positioning System (A-GPS) data for transmission by the modem over the wireless network to the fleet and asset management system, and further configured to determine location of the object based upon A-GPS data received from the fleet and asset management system in response to the location data request.

8. An apparatus according to claim 7, further comprising:
a GPS module configured to obtain GPS data independent from the fleet and management system, the processor determining the location of the object based on the GPS data.
9. An apparatus according to claim 6, wherein the input interface couples to a sensor or switch of the object for retrieving the data.
10. An apparatus according to claim 6, wherein a data log message is received from the fleet and management system over the wireless network, the data log message specifying scheduling information for collection of the data.
11. A computer-readable medium carrying one or more sequences of one or more instructions for transmitting data associated with an object tracked by a fleet and asset management system over a wireless network, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:
storing data received from an input interface coupling the object;
receiving over the wireless network a request message from the fleet and asset management system, the request message specifying a schedule for transmission of the stored data to the fleet and asset management system and associated schedule activation information, wherein the schedule activation information specifies activation of the schedule based upon a state of the input interface; and
selectively transmitting the stored data over the wireless network to the fleet and asset management system according to the schedule, if the schedule is activated.
12. A computer-readable medium according to claim 11, wherein the wireless network is a two-way paging system and includes a Global Positioning System (GPS) reference network, the

computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

- transmitting a location data request for Assisted-Global Positioning System (A-GPS) data over the wireless network to the fleet and asset management system;
- receiving the A-GPS data in response to the location data request; and
- determining location of the object based upon the A-GPS data.

13. A computer-readable medium according to claim 12, further including instructions for causing the one or more processors to perform the steps of:

- obtaining GPS data independent from the fleet and management system; and
- determining the location of the object based on the GPS data.

14. A computer-readable medium according to claim 11, wherein the input interface couples to a sensor or switch of the object for retrieving the data.

15. A computer-readable medium according to claim 11, further including instructions for causing the one or more processors to perform the step of:

- receiving a data log message from the fleet and management system over the wireless network, the data log message specifying scheduling information for collection of the data.

16. A method for acquiring data associated with an object tracked over a wireless network, the method comprising:

- transmitting a message over the wireless network to a telemetry device coupled to the object via an input interface, the telemetry device storing data received from the input interface, wherein the message specifies a schedule for transmission of the stored data and associated schedule activation information that specifies activation of the schedule based upon a state of the input interface; and

selectively receiving the stored data in the telemetry device over the wireless network according to the schedule, if the schedule is activated.

17. A method according to claim 16, wherein the wireless network is a two-way paging system and includes a Global Positioning System (GPS) reference network, the method further comprising:

receiving a location data request from the telemetry device for Assisted-Global Positioning System (A-GPS) data; and
transmitting the A-GPS data in response to the location data request.

18. A method according to claim 17, wherein the telemetry device obtains GPS data independent from the GPS reference network and determines the location of the object based on the GPS data.

19. A method according to claim 16, wherein the input interface couples to a sensor or switch of the object for retrieving the data.

20. A method according to claim 16, further comprising:
transmitting a data log message to the telemetry device, the data log message specifying scheduling information for collection of the data.

21. A system for acquiring data associated with an object tracked over a wireless network, the system comprising:
means for transmitting a message over the wireless network to a telemetry device coupled to the object via an input interface, the telemetry device storing data received from the input interface, wherein the message specifies a schedule for transmission of the stored data and associated schedule activation information that specifies activation of the schedule based upon a state of the input interface; and

means for selectively receiving the stored data in the telemetry device over the wireless network according to the schedule, if the schedule is activated.

22. A system according to claim 21, wherein the wireless network is a two-way paging system and includes a Global Positioning System (GPS) reference network, the system further comprising:

means for receiving a location data request from the telemetry device for Assisted-Global Positioning System (A-GPS) data; and

means for transmitting the A-GPS data in response to the location data request.

23. A system according to claim 22, wherein the telemetry device obtains GPS data independent from the GPS reference network and determines the location of the object based on the GPS data.

24. A system according to claim 21, wherein the input interface couples to a sensor or switch of the object for retrieving the data.

25. A system according to claim 21, further comprising:

means for transmitting a data log message to the telemetry device, the data log message specifying scheduling information for collection of the data.

26. A computer-readable medium carrying one or more sequences of one or more instructions for acquiring data associated with an object tracked over a wireless network, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

transmitting a message over the wireless network to a telemetry device coupled to the object via an input interface, the telemetry device storing data received from the input interface, wherein the message specifies a schedule for transmission of the stored data and

associated schedule activation information that specifies activation of the schedule based upon a state of the input interface; and
selectively receiving the stored data in the telemetry device over the wireless network according to the schedule, if the schedule is activated.

27. A computer-readable medium according to claim 26, wherein the wireless network is a two-way paging system and includes a Global Positioning System (GPS) reference network, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

receiving a location data request from the telemetry device for Assisted-Global Positioning System (A-GPS) data; and
transmitting the A-GPS data in response to the location data request.

28. A computer-readable medium according to claim 27, wherein the telemetry device obtains GPS data independent from the GPS reference network and determines the location of the object based on the GPS data.

29. A computer-readable medium according to claim 26, wherein the input interface couples to a sensor or switch of the object for retrieving the data.

30. A computer-readable medium according to claim 26, further including instructions for causing the one or more processors to perform the step of:
transmitting a data log message to the telemetry device, the data log message specifying scheduling information for collection of the data.